

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
16 June 2005 (16.06.2005)

PCT

(10) International Publication Number
WO 2005/054503 A2

- (51) International Patent Classification⁷: **C12Q 1/68**
- (74) Agent: **GRUBB, Philip**; Novartis AG, Corporate Intellectual Property, CH-4002 Basel (CH).
- (21) International Application Number:
PCT/EP2004/013727
- (22) International Filing Date: 2 December 2004 (02.12.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
60/526,722 3 December 2003 (03.12.2003) US
- (71) Applicant (for all designated States except AT, US): **NOVARTIS AG** [CH/CH]; Lichstrasse 35, CH-4056 Basel (CH).
- (71) Applicant (for AT only): **NOVARTIS PHARMA GMBH** [AT/AT]; Brunner Strasse 59, A-1230 Vienna (AT).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **BIGAUD, Marc** [FR/FR]; Rue de Bellevue, F-68280 Sundhoffen (FR). **KEHREN, Jeanne** [FR/FR]; 1, rue des Abeilles, F-68490 Bantzenheim (FR). **RAULF, Friedrich** [DE/DE]; Merianstrasse 29, 79104 Freiburg (DE). **WIECZOREK, Grazyna** [PL/CH]; Ob dem Baselweg 10, CH-4124 Schönenbuch (CH).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:
— without international search report and to be republished upon receipt of that report
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: BIOMARKERS FOR GRAFT REJECTION

(57) Abstract: Methods are disclosed for diagnosing rejection in a transplanted subject, monitoring rejection in a transplanted subject at risk thereof, preventing, inhibiting, reducing or treating rejection in a transplanted subject, or identifying agents for use in the prevention, inhibition, reduction or treatment of rejection, based on genes which are differentially expressed in transplanted subjects.



WO 2005/054503 A2